Lite APA

- Gravity **9.5 BLG**
- ABV **3.7 %**
- IBU **27**
- SRM **4.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **20.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **24.2 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **16 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **69 C**, Time **50 min**
- Temp **77 C**, Time **10 min**

Mash step by step

- Heat up **16 liter(s)** of strike water to **75.1C**
- Add grains
- Keep mash **50 min** at **69C**
- Keep mash **10 min** at **77C**
- Sparge using **12.2 liter(s)** of **76C** water or to achieve **24.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg *(50%)*	80 %	5
Grain	Strzegom Monachijski typ I	1 kg *(25%)*	79 %	16
Grain	Pszeniczny	0.5 kg *(12.5%)*	85 %	4
Grain	Płatki owsiane	0.5 kg *(12.5%)*	60 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	15 g	60 min	14 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	---

Extras

Type	Name	Amount	Use for	Time
Water Agent	Chlorek wapnia	5 g	Mash	---
Water Agent	Gips piwowarski	5 g	Mash	---